

REMARKS

Claims 1-7, 14-18, and 34-37 are pending in the application and are at issue.

Claims 1-7, 14-18, and 34-37 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The examiner contends that the terms "poly(ethylene glycol 30)" and "polyoxyethylene 15" are indefinite and are tradenames. Applicants traverse this rejection.

The terms recited in claim 1 are not trade-names, but are the chemical names of two copolymers, the identity of which is readily understood and determined by persons skilled in the art.

The first claimed polymer is a copolymer of poly(ethylene glycol 30) and polyhydroxy stearate. The term "poly(ethylene glycol 30)" or PEG30 is fully understood by persons skilled in the art to mean a polyethylene glycol containing an average of 30 moles of ethylene glycol. See attached Exhibit A, which shows that a standard nomenclature for polyethylene glycol is PEG or polyethylene glycol followed by a number indicating the average number of moles of ethylene glycol present in the molecule. Also see Exhibit B, page 1244, under "PEG-30 dipolyhydroxystearate," which includes other names for the polymer. The polymer is available commercially as ARLACEL P135, from Uniqema Americas.

Similarly, the term "polyoxyethylene 15" is a polyethylene glycol containing an average of 15 moles of ethylene oxide. In the art, the terms "polyoxyethylene" and "polyethylene glycol" are synonymous structurally. See Exhibit B, page 338, and Exhibit C under the definitions of PEG and polyethylene glycol.

The examiner is further directed to page 15, lines 3-9, of the specification, which provide additional information concerning the claimed copolymers.

In summary, it is submitted that the metes and bounds of the polymers recited in the claims are readily discernable to persons skilled in the art. The nomenclature used in claim 1 is not a tradename, brand name, or trivial name, but the actual chemical name of the claimed copolymers.

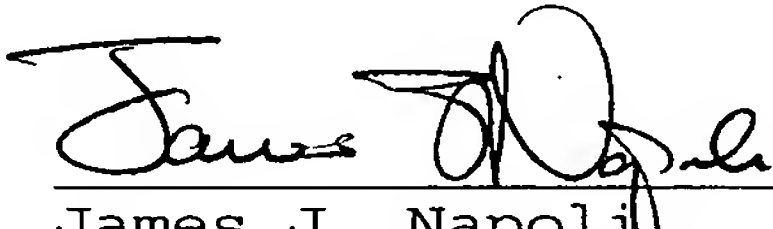
Therefore, it is submitted that the present claims fully comply with U.S.C. §112, second paragraph, and that the rejection should be withdrawn.

It is further submitted that all claims are in a form and scope for allowance. An early and favorable action on the merits is respectfully requested.

Should the examiner wish to discuss the foregoing, or any matter of form in an effort to advance this application toward allowance, the examiner is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

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May 24, 2006

CTFA International Cosmetic Ingredient Dictionary

Fourth Edition

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Published by

The Cosmetic, Toiletry, and Fragrance Association
1101 17th Street, N.W., Suite 300
Washington, D.C. 20036

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Library of Congress Catalog Card No. 91-73364

PRINTED IN THE UNITED STATES OF AMERICA

PEA EXTRACT

CAS Number: 90082-41-0

Definition: Pea Extract is an extract of *Pisum sativum*.

Other Names:

Extract of Pea
Pisum Sativum Extract

Materials Containing:

Hydroplastidine Pisum (Vevy)
Lipoplastidine Pisum (Vevy)**PEANUTAMIDE MEA**

Definition: Peanutamide MEA is a mixture of ethanolamides of the fatty acids derived from Peanut Oil (q.v.). It conforms generally to the formula:



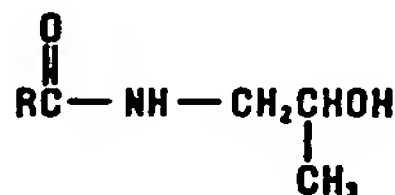
where RCO- represents the fatty acids derived from peanut oil.

Information Sources: CTFA D

Other Names:

N-(2-Hydroxyethyl) Peanut Acid Amide
Monoethanolamine Peanut Acid Amide
Peanut Fatty Acid Amide, N-(2-Hydroxyethyl)-
Peanut Fatty Acid Monoethanolamide**PEANUTAMIDE MIPA**

Definition: Peanutamide MIPA is a mixture of isopropanolamides of the fatty acids derived from Peanut Oil (q.v.). It conforms generally to the formula:



where RCO- represents the fatty acids derived from peanut oil.

Other Names:

N-(2-Hydroxypropyl)Peanut Acid Amide
Peanut Fatty Acid Amide, N-(2-Hydroxypropyl)-**PEANUT GLYCERIDES**

Definition: Peanut Glycerides is a mixture of mono-, di- and triglycerides derived from Peanut Oil (q.v.).

Other Names:

Glycerides, Peanut Oil, Mono-, Di- and Tri-
Olicine (Gattefosse)**PEANUT OIL**

CAS Number: 8002-03-7

EINECS Number: 232-296-4

Definition: Peanut Oil is the refined fixed oil obtained from the seed kernels of one or more of the cultivated varieties of *Arachis hypogaea*.

Information Sources: ARG, AUS, BEL, BP, BPC, BRA, 21CFR175.105, 21CFR176.200, 21CFR176.210, 21CFR177.2800, 21CFR182.70, CTFA S, CZE, DA, DDR, EGY, FI, FIN, IND, ITA, JCID-II, MAR, MEX, MI-9(6858), NED, NF XVII, PF, PN, POL, POR, TSCA, USAN, USD, WHO, YUG

Other Names:

Arachis Oil
EmCon Peanut (Fanning)
Oils, Peanut

Materials Containing:

Balm Mint Oil infus. (Novarom)
Carrot Oil, extra (Novarom)
Lanosoluble A (Prod'Hyg)
Tocopherol oil (Novarom)
Vitamin A Acetate 1.0 million I.U./g (BASF)
Vitamin A Acetate 1.5 million I.U./g (BASF)
Vitamin A Palmitate 1.5 million I.U./g (BASF)
Vitamin A Palmitate 1.0 million I.U./g (BASF)
Vitamin A Palmitate w/Vitamin D3 (BASF)**PEANUT OIL PEG-6 ESTERS**

Definition: Peanut Oil PEG-6 Esters is a complex mixture obtained from the transesterification of Peanut Oil (q.v.) and PEG-6 (q.v.).

Other Names:

Labrafil M 1969 CS (Gattefosse)

PEAR EXTRACT

CAS Number: 90082-43-2

Definition: Pear Extract is an extract of the fruit of *Pyrus communis*.

Other Names:

Extract of Pear
Pyrus Communis Extract

Materials Containing:

Pear HS (Alban Muller)

PECAN SHELL POWDERDefinition: Pecan Shell Powder is a powder made from finely ground shells of the pecan, *Carya illinoensis*.**PECTIN**

CAS Number: 9000-69-5

EINECS Number: 232-553-0

Definition: Pectin is a purified carbohydrate product obtained from the dilute acid extract of the inner portion of the rind of citrus fruits or from apple pomace. It consists chiefly of partially methoxylated polygalacturonic acids.

Information Sources: AUS, BRA, 21CFR135.140, 21CFR145, 21CFR150, 21CFR173.385, 21CFR184.1588, FCC, JCID-IV, MAR, MI-11(7009), OTC-LOH, TSCA, USD, USP XXII

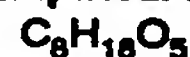
Other Names:

Citrus Pectin
Genu (Hercules)**PEG-4**

CAS Numbers: 25322-68-3 (generic); 112-60-7

EINECS Number: 203-989-9

Empirical Formula:



Definition: PEG-4 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 4.

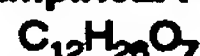
Information Sources: 21CFR73.1, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, CTFA S, FCC, JSCI, MAR, MI-11(7545), ROM, TSCA, USAN

Other Names:

Carbowax PEG 200 (Union Carbide)
Emkapol 200 (ICI Americas)
Ethanol, 2,2'-[Oxybis(2,1-Ethanedioxy)]Bis-
[11]
Hetoxide PEG-200 (Heterene)
Hodag PEG 200 (Hodag)
ICI PEG 200 (ICI Americas)
Lipoxol 200 MED (Huls America)
Macol E-200 (PPG/Mazer)
Macrogol 200
2,2'-[Oxybis(2,1-Ethanedioxy)]Bisethanol
[21]
Polyethylene Glycol 200
Polyglycol E-200 (Dow Chemical)
Polyoxyethylene (4)
Unipeg-200 X (UPI)
Upiwx 200 (UPI)**PEG-6**CAS Numbers: 25322-68-3 (generic);
2615-15-8

EINECS Number: 220-045-1

The inclusion of any compound in the Dictionary does not indicate that use of that substance as a cosmetic ingredient complies with the laws and regulations governing such use in the United States or any other country.

Empirical Formula:

Definition: PEG-6 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 6.

Information Sources: BP, BPC, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3570, 21CFR178.3910, CTFA S, CZE, FCC, JSCI, MAR, MI-11 (7545), NF XVII, PJ, ROM, TSCA, USAN, USD

Other Names:

Alkapol PEG 300 (Rhône-Poulenc)
Carbowax PEG 300 (Union Carbide)
Emkapol 300 (ICI Americas)
Hetoxide PEG-300 (Heterene)
Hexaethylene Glycol
Hodag PEG 300 (Hodag)
ICI PEG 300 (ICI Americas)
Lipoxol 300 MED (Hüls America)
Lutrol E300 (BASF)
Macrogol 300
3,6,9,12,15-Pentaoxaheptadecane-1,17-Diol
Polyethylene Glycol 300
Polyglycol E-300 (Dow Chemical)
Polyoxyethylene (6)
Upiwx 300 (UPI)

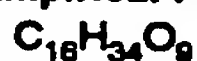
Materials Containing:

Arlenfil 4015 (Gattefosse)
Calenfil 3646 (Gattefosse)
Camofil 4064 (Gattefosse)
Carbowax PEG 540 (Union Carbide)
Hodag PEG 540 (Hodag)
Hodag 150-S (Hodag)
Lanobase S.E. (Lanaetex)
LIPOPEG 15-S (Lipo)
Lipoxol 550 MG MED (Hüls America)
Macrogol 1500
Pegospense 1500 DL (Lonza)
Pegospense 1500 DO (Lonza)
Pegospense 1500 MS (Lonza)
Protamate 1500 DPS (Protameen)
Swertiall (Ichimaru Pharcos)
Tefose 63 (Gattefosse)
Tefose 1500 (Gattefosse)
Unipeg-1500 X (UPI)
Uniwax 1450 (UPI)

PEG-8

CAS Numbers: 25322-68-3 (generic); 5117-19-1

EINECS Number: 225-856-4

Empirical Formula:

Definition: PEG-8 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 8.

Information Sources: BRA, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, 21CFR181.22, 21CFR181.30, CTFA S, FCC, HUN, JSCI, MAR, MI-9(7349), NF XVII, NFJ, PJ, PN, POL, ROM, TSCA, USAN, USD

Other Names:

Carbowax PEG 400 (Union Carbide)
Emkapol 400 (ICI Americas)
3,6,9,12,15,18,21-Heptaoxatricosane-1,23-diol
Hodag PEG 400 (Hodag)
ICI PEG 400 (ICI Americas)
Lipoxol 400 MED (Hüls America)
Lutrol E400 (BASF)
Macol E-400 (PPG/Mazer)
Macrogol 400
Polyethylene Glycol 400
Polyglycol E-400 (Dow Chemical)
Polyoxyethylene (8)
Unipeg-400 X (UPI)
Upiwx 400 (UPI)

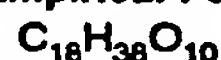
Materials Containing:

Afron 22 (Vevy)
Carbossalina (Vevy)
Crystallin Protein (Sederma)
Hair Complex Aquosum (Kurt Richter)
Kalixide Idrata (Vevy)
Melibion (Vevy)
Texapon SG (Henkel)

PEG-9

CAS Numbers: 25322-68-3 (generic); 3386-18-3

EINECS Number: 222-206-1

Empirical Formula:

Definition: PEG-9 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 9.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11(7545), NF XVII, TSCA, USAN

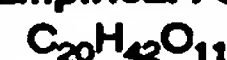
Other Names:

Alkapol PEG-400 (Rhône-Poulenc)
3,6,9,12,15,18,21,24-Octaoxahexacosane-1,26-diol
Polyethylene Glycol 450
Polyoxyethylene (9)

PEG-10

CAS Numbers: 25322-68-3 (generic); 5579-66-8

EINECS Number: 226-962-3

Empirical Formula:

Definition: PEG-10 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 10.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11(7545), NF XVII, TSCA

Other Names:

3,6,9,12,15,18,21,24,27-Nonaoxanonacosane-1,29-diol
Polyethylene Glycol 500
Polyoxyethylene (10)

PEG-12

CAS Numbers: 25322-68-3 (generic); 6790-09-6

EINECS Number: 229-859-1

Empirical Formula:

Definition: PEG-12 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 12.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CTFA S, FCC, JSCI, MI-9(7349), NF XVII, ROM, TSCA, USAN

Other Names:

Carbowax PEG 600 (Union Carbide)
Emkapol 600 (ICI Americas)
Hodag PEG 600 (Hodag)
ICI PEG 600 (ICI Americas)
Lipoxol 600 MED (Hüls America)
Macol E-600 (PPG/Mazer)
Macrogol 600
Polyethylene Glycol 600
Polyglycol E-600 (Dow Chemical)
Polyoxyethylene (12)
3,6,9,12,15,18,21,24,27,30,33-Undecaoxapentatriacontane-1,35-Diol
3,6,9,12,15,18,21,24,27,30,33-Undecaoxapentatriacontane-1,35-diol
Unipeg-600 (UPI)
Upiwx 600 (UPI)

The inclusion of any compound in the Dictionary does not indicate that use of that substance as a cosmetic ingredient complies with the laws and regulations governing such use in the United States or any other country.

PEG-14**CAS Number:** 25322-68-3 (generic)**Definition:** PEG-14 is the polymer of ethylene oxide that conforms generally to the formula:

where n has an average value of 14.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11(7545), NF XVII, TSCA, USAN**Other Names:**Alkapol PEG-600 (Rhône-Poulenc)
Polyethylene Glycol (14)
Polyoxyethylene (14)**PEG-16****CAS Number:** 25322-68-3 (generic)**Definition:** PEG-16 is the polymer of ethylene oxide that conforms generally to the formula:

where n has an average value of 16.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11(7545), NF XVII, TSCA, USAN**Other Names:**ICI PEG 800 (ICI Americas)
Lipoxol 800 MED (Hüls America)
Polyethylene Glycol (16)
Polyoxyethylene (16)**PEG-18****CAS Number:** 25322-68-3 (generic)**Definition:** PEG-18 is the polymer of ethylene oxide that conforms generally to the formula:

where n has an average value of 18.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11(7545), TSCA, USAN**Other Names:**Polyethylene Glycol (18)
Polyoxyethylene (18)**PEG-20****CAS Number:** 25322-68-3 (generic)**Definition:** PEG-20 is the polymer of ethylene oxide that conforms generally to the formula:

where n has an average value of 20.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CTFA S, FCC, JSCI, MI-9(7349), NF XVII, ROM, TSCA, USAN**Other Names:**Carbowax PEG 900 (Union Carbide)
Carbowax PEG 1000 (Union Carbide)
Hodag PEG 1000 (Hodag)
ICI PEG 1000 (ICI Americas)
Lipoxol 1000 MED (Hüls America)
Macrogol 1000
Polyglycol E-1000 (Dow Chemical)
Polyglycol E-1450 (Dow Chemical)
Polyoxyethylene (20)
Unipeg-1000 X (UPI)
Upiwx 1000 (UPI)**PEG-32****CAS Number:** 25322-68-3 (generic)**Definition:** PEG-32 is the polymer of ethylene oxide that conforms generally to the formula:

where n has an average value of 32.

Information Sources: BP, BPC, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CTFA S, CZE, FCC, HUN, JCID-II, MAR, MI-9(7349), NF XVII, TSCA, USAN, USD**Other Names:**Carbowax PEG 1450 (Union Carbide)
Carbowax Polyethylene Glycol 1450 (Union Carbide)
Hodag PEG 1450 (Hodag)
ICI PEG 1500 (ICI Americas)
Lipoxol 1550 MED (Hüls America)
Lutrol E1500 (BASF)
Macrogol 1540
Polyethylene Glycol 1540
Polyoxyethylene (32)
Protachem 1450 NF (Protameen)
Unipeg-1540 X (UPI)**Materials Containing:**Carbowax PEG 540 (Union Carbide)
Hodag PEG 540 (Hodag)
Hodag 150-S (Hodag)
Lanobase S.E. (Lanaetex)
LIPOPEG 15-S (Lipo)
Lipoxol 550 MG MED (Hüls America)**Macrogol 1500**Pegospense 1500 DL (Lonza)
Pegospense 1500 DO (Lonza)
Pegospense 1500 MS (Lonza)
Protamate 1500 DPS (Protameen)
Swertiall (Ichimaru Pharcos)
Tefose 63 (Gattefosse)
Tefose 1500 (Gattefosse)
Unipeg-1500 X (UPI)
Uniwx 1450 (UPI)**PEG-40****CAS Number:** 25322-68-3 (generic)**Definition:** PEG-40 is the polymer of ethylene oxide that conforms generally to the formula:

where n has an average value of 40.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11(7545), NF XVII, ROM, TSCA, USAN**Other Names:**ICI PEG 2000 (ICI Americas)
Lipoxol 2000 MED (Hüls America)
Polyethylene Glycol 2000
Polyoxyethylene (40)**PEG-55****CAS Number:** 25322-68-3 (generic)**Definition:** PEG-55 is the polymer of ethylene oxide that conforms generally to the formula:

where n has an average value of 55.

Information Sources: MI-11(7545), NF XVII, USAN**Other Names:**ICI PEG 3300 (ICI Americas)
Polyethylene Glycol (55)
Polyoxyethylene (55)**PEG-60****CAS Number:** 25322-68-3 (generic)**Definition:** PEG-60 is the polymer of ethylene oxide that conforms generally to the formula:

where n has an average value of 60.

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Information Sources: MI-11 (7545), NF XVII, USAN

Other Names:

Lipoxol 3000 MED (Hüls America)
Polyethylene Glycol 3000
Polyoxyethylene (60)

PEG-75

CAS Number: 25322-68-3 (generic)

Definition: PEG-75 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 75.

Information Sources: BP, BPC, BRA, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CTFA S, FCC, HUN, JSCI, MAR, MI-9(7349), NF XVII, NFJ, PJ, PN, POL, ROM, TSCA, USAN, USD

Other Names:

Carbowax PEG 3350 (Union Carbide)
Emkapol 4000 (ICI Americas)
Hodag PEG 3350 (Hodag)
ICI PEG 4000 (ICI Americas)
Lipoxol 4000 MED (Hüls America)
Lutrol E4000 Prill (BASF)
Macrogol 4000
Pioze 40 (Nippon Oil & Fats)
Polyethylene Glycol 4000
Polyglycol E-3350 (Dow Chemical)
Polyoxyethylene (75)
Unipeg-4000 X (UPI)
Upiwx 3350 (UPI)

PEG-100

CAS Number: 25322-68-3 (generic)

Definition: PEG-100 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 100.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11 (7545), NF XVII, USAN

Other Names:

Carbowax PEG 4600 (Union Carbide)
Polyethylene Glycol (100)
Polyoxyethylene (100)

PEG-135

CAS Number: 25322-68-3 (generic)

Definition: PEG-135 is the polymer of ethylene oxide that conforms to the formula:



where n has an average value of 135.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11 (7545), NF XVII, USAN

Other Names:

Polyethylene Glycol (135)
Polyoxyethylene (135)

PEG-150

CAS Number: 25322-68-3 (generic)

Definition: PEG-150 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 150.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.300, 21CFR177.2420, 21CFR178.3750, 21CFR178.3910, CTFA S, FCC, JSCI, MAR, MI-9(7349), NF XVII, PJ, PN, ROM, TSCA, USAN

Other Names:

Carbowax PEG 8000 (Union Carbide)
Emkapol 6000 (ICI Americas)
Hodag PEG 8000 (Hodag)
ICI PEG 6000 (ICI Americas)
Lipoxol 6000 MED (Hüls America)
Lutrol E 8000 Prill (BASF)
Macrogol 6000
Polyethylene Glycol 6000
Polyglycol E-8000 (Dow Chemical)
Polyoxyethylene (150)
Unipeg-6000 X (UPI)
Upiwx 8000 (UPI)

PEG-180

CAS Number: 25322-68-3 (generic)

Definition: PEG-180 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 180.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, MI-11 (7545), NF XVII, USAN

Other Names:

Polyethylene Glycol (180)
Polyoxyethylene (180)

PEG-200

CAS Number: 25322-68-3 (generic)

Definition: PEG-200 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 200.

Information Sources: 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CTFA D, FCC, MI-11 (7545), NF XVII, TSCA, USAN

Other Names:

Polyethylene Glycol 9000
Polyoxyethylene (200)

PEG-240

CAS Number: 25322-68-3 (generic)

Definition: PEG-240 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 240.

Information Sources: 21CFR172.770, 21CFR175.300, 21CFR178.3910, MI-11 (7545), NF XVII, USAN

Other Names:

Lipoxol 12000 (Hüls America)
Polyethylene Glycol (240)
Polyoxyethylene (240)

PEG-350

CAS Number: 25322-68-3 (generic)

Definition: PEG-350 is the polymer of ethylene oxide that conforms generally to the formula:



where n has an average value of 350.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSCI, MI-11 (7545), NF XVII, TSCA, USAN

Other Names:

Lipoxol 20000 (Hüls America)
PEG Compound 20M (Union Carbide)

The inclusion of any compound in the Dictionary does not indicate that use of that substance as a cosmetic ingredient complies with the laws and regulations governing such use in the United States or any other country.

International Committee for the Abolition of Anti-Slavery

1971-1972
1973

Working 1971

1971-1972

1973-1974

1975-1976

Cetyloxypropyl Glyceryl Methoxypropyl Myristamide (Cont.)

Function: Skin-Conditioning Agent - Emollient

Trade Name:
Aqua-ceramide (Kao Corp.)

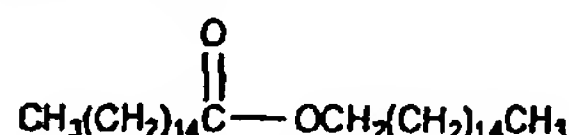
CETYL PALMITATE

CAS No. 540-10-3 **EINECS No.** 208-736-6

JPN Translation:
パルミチン酸セチル

Empirical Formula:
 $C_{32}H_{64}O_2$

Definition: Cetyl Palmitate is the ester of cetyl alcohol and palmitic acid. It conforms generally to the formula:



Information Sources: CIR: [S] JACT-1(2)-1982, CTFA S, JCIC, JCLS, JSQI, MI-13 (2040), RIFM, TSCA

Chemical Class: Esters

Functions: Fragrance Ingredient; Skin-Conditioning Agent - Occlusive

Reported Product Categories: Bath Preparations, Misc.; Body and Hand Preparations (Excluding Shaving Preparations); Moisturizing Preparations; Eyeliners; Bath Capsules; Face and Neck Preparations (Excluding Shaving Preparations); Eye Makeup Preparations, Misc.; Skin Care Preparations, Misc.; Shampoos (Non-coloring); Bath Oils, Tablets, and Salts; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Lipsticks; Night Skin Care Preparations; Eye Shadows; Eyebrow Pencils; Suntan Gels, Creams, and Liquids; Suntan Preparations, Misc.; Foundations; Makeup Preparations (Not eye), Misc.; Paste Masks (Mud Packs); Aftershave Lotions; Baby Shampoos; Eye Lotions

Technical/Other Names:
Hexadecanoic Acid, Hexadecyl Ester
n-Hexadecyl Hexadecanoate
Hexadecyl palmitate (RIFM)
Hexadecyl Palmitate
Palmityl Palmitate

Trade Names:
AEC Cetyl Palmitate (A & E Connock)
Crodamol CP (Croda Chemicals)
Cutina CP (Cognis Care Chemicals/NJ)
Cutina CP (Cognis Care Chemicals/PA)
Cutina CP (Cognis Deutschland)
Cutina CPA (Cognis Deutschland)
DUB PC (Stearinerie Dubois Fils)
ESTOL 3694 (Uniqema Europe)
Jeechem CP (Jeen)

Kokarno-S (Kokyu Alcohol)
Nikkol N-SP (Nikko)
Palmitate de Cetyl (Gattefosse s.a.)
Pelemol CP (Phoenix)
Radia 7500 (Oleon NV)
Sabowax CP (Sabo)
STEPAN 653 (Stepan)
Trivent CP (Trivent)
Unlester PC (Chemunion)
Unimul-1616 (Universal Preserv-A-Chem)
Unitina CP (Universal Preserv-A-Chem)
Waglinol 24216 (Industrial Quimica)
WGS Cetyl Palmitate (Werner G. Smith)

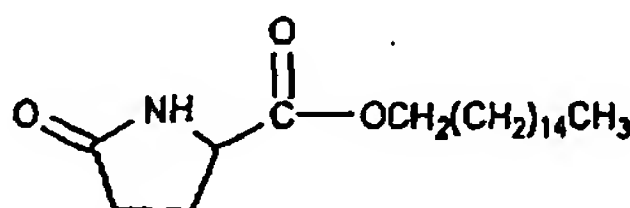
Trade Name Mixtures:
Cutina CBS (Cognis Deutschland)
Emulgade CBN (Cognis Deutschland)
Emulgade CL Special (Cognis Deutschland)
Emulgade CM (Cognis Care Chemicals/NJ)
Emulgade CM (Cognis Deutschland)
Emulgade SE-PF (Cognis Care Chemicals/NJ)
Emulgade SE-PF (Cognis Deutschland)
ESP Dry feel-Olive (Earth Supplied Products)
ESP Dry Oil-MO (Earth Supplied Products)
ESP Dry Wax hi vis (Earth Supplied Products)
ESP Dry Wax low vis (Earth Supplied Products)
ESP Dry Wax med vis (Earth Supplied Products)
Hairwax 7686 o.E. (Kahl)
Lamesoft PW-45 (Cognis Care Chemicals/NJ)
Lipocerite Standard (Vevy)
Neo PCL SE o/w 2/066280 (Symrise)
Prodhyrouge 2000 (Prod'Hyg)
Sabowax AE (Sabo)
Sabowax GF (Sabo)
Unitina BW (Universal Preserv-A-Chem)

CETYL PCA

CAS No. 37673-20-4 **EINECS No.** 253-589-3

Empirical Formula:
 $C_{21}H_{39}NO_3$

Definition: Cetyl PCA is the ester of Cetyl Alcohol (q.v.) and PCA (q.v.) that conforms to the formula:



Chemical Classes: Esters; Heterocyclic Compounds

Function: Skin-Conditioning Agent - Miscellaneous

Technical/Other Names:
Cetyl Pyrrolidonecarboxylate
Pyrrolidone Carboxylic Acid, Cetyl Ester

Trade Name:
Cetylidonecetyl (CEP (Solabia))

Trade Name Mixture:
Cetylidone U-A (UCIB (Solabia))

CETYL PEG/PPG-15/15 BUTYL ETHER DIMETHICONE

Definition: Cetyl PEG/PPG-15/15 Butyl Ether Dimethicone is the copolymer of Cetyl Dimethicone (q.v.) and a butyl ether of a derivative of Dimethicone containing an average of 15 moles of ethylene oxide and 15 moles of propylene oxide.

Chemical Class: Siloxanes and Silanes

Functions: Skin-Conditioning Agent - Miscellaneous; Surfactant - Emulsifying Agent

Trade Names:
AEC Cetyl PEG/PPG-15/15 Butyl Ether Dimethicone (A & E Connock)
Wacker Belsil DMC 3071 VP (Wacker-Chemie)

CETYL PEG/PPG-10/1 DIMETHICONE

Definition: Cetyl PEG/PPG-10/1 Dimethicone is a copolymer of Cetyl Dimethicone (q.v.) and an alkoxyated derivative of Dimethicone (q.v.) containing an average of 10 moles of ethylene oxide and 1 mole of propylene oxide.

Information Sources: JCIC, JCLS

Chemical Class: Siloxanes and Silanes

Functions: Skin-Conditioning Agent - Miscellaneous; Surfactant - Emulsifying Agent

Reported Product Categories: Foundations; Makeup Bases; Shaving Cream (Aerosol, Brushless and Lather)

Technical/Other Name:
Methylpolysiloxane-Cetylmethylpolysiloxane-Poly(oxyethylene-oxypropylene) Methylpolysiloxane Copolymer

Trade Names:
Abil EM-90 (Degussa Care Specialties)
AEC Cetyl PEG/PPG-10/1 Dimethicone (A & E Connock)
Biolube I-90 (Biosil Technologies, Inc.)
Biolube S-90 (Biosil Technologies, Inc.)

Trade Name Mixture:
Abil WE 09 (Degussa Care Specialties)

CETYL-PG HYDROXYETHYL DECANAMIDE

JPN Translation:
セチル PG ヒドロキシエチルデカナミド

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PEG-150 Dioleate (Cont.)

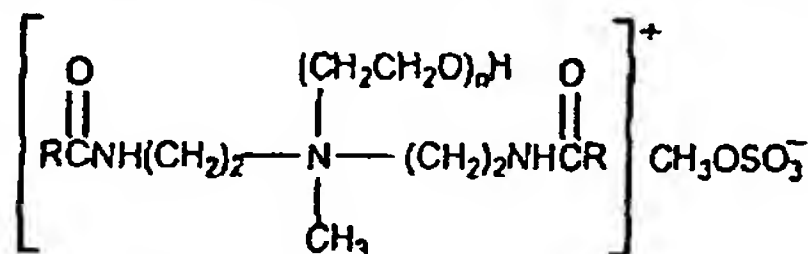
Function: Surfactant - Cleansing Agent

Technical/Other Names:
Polyethylene Glycol 6000 Dioleate
Polyoxyethylene (150) Dioleate

Trade Names:
AEC PEG-150 Dioleate (A & E Connock)
STEPAN PEG 6000 DO (Stepan)

PEG-3 DIOLEOYLAMIDOETHYLMONIUM METHOSULFATE

Definition: PEG-3 Dioleoylamidoethylmonium Methosulfate is the quaternary ammonium salt that conforms to the formula:



where RCO- represents the oleoyl moiety and n has an average value of 3.

Chemical Class: Quaternary Ammonium Compounds

Functions: Antistatic Agent; Hair Conditioning Agent

Reported Product Category: Hair Dyes and Colors (All Types Requiring Caution Statements and Patch Tests)

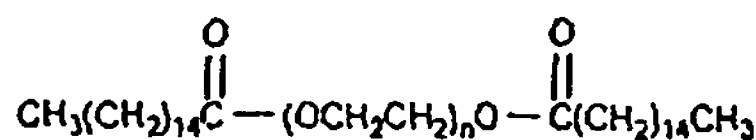
Trade Name:
Incroquat HO-80PG (Croda, Inc.)

PEG-3 DIPALMITATE

CAS No.: 32628-06-1 (Generic)

JPN Translation:
ジパルミチン酸 PEG - 3

Definition: PEG-3 Dipalmitate is the polyethylene glycol diester of palmitic acid that conforms generally to the formula:



where n has an average value of 3.

Information Sources: 21CFR175.300, JCIC, JCLS, JSQI, MI-13(7660), TSCA

Chemical Class: Alkoxylated Carboxylic Acids

Function: Surfactant - Emulsifying Agent

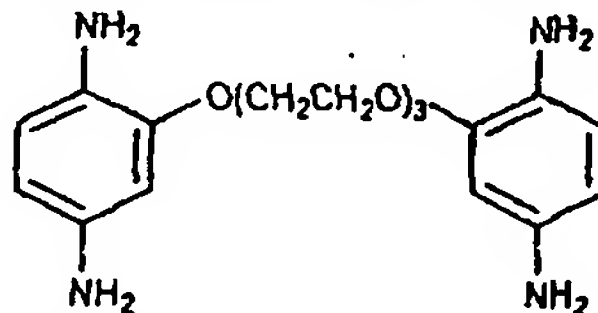
Technical/Other Names:
Polyethylene Glycol (3) Dipalmitate
Polyethylene Glycol 150 Dipalmitate
Polyoxyethylene (3) Dipalmitate

Trade Name:
AEC PEG-3 Dipalmitate (A & E Connock)

PEG-3 2,2'-DI-p-PHENYLENEDIAMINE

Empirical Formula:
 $\text{C}_{18}\text{H}_{26}\text{N}_4\text{O}_4$

Definition: PEG-3 2,2'-Di-p-Phenylenediamine is the organic compound that conforms generally to the formula:



See "Regulatory and Ingredient Use Information," for Colorants in Volume 1, Introduction, Part A.

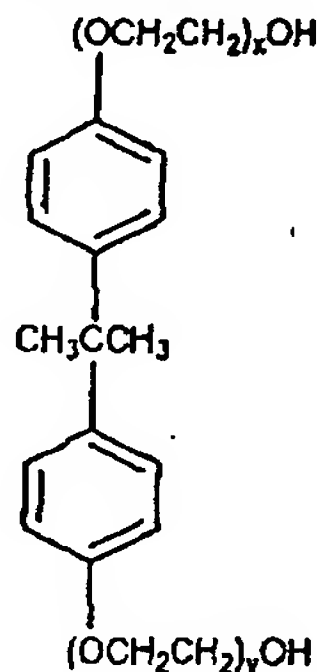
Chemical Classes: Amines; Color Additives - Hair; Ethers

Function: Hair Colorant

PEG-13 DIPHENYLOL PROPANE

CAS No.: 9014-86-2

Definition: PEG-13 Diphenylol Propane is the organic compound that conforms generally to the formula:



where x+y has an average value 13.

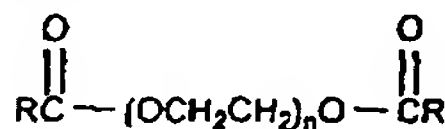
Chemical Class: Alkoxylated Alcohols

Function: Surfactant - Emulsifying Agent

Technical/Other Names:
Polyethylene Glycol (13) Diphenylol Propane
Polyoxyethylene (13) Diphenylol Propane

PEG-30 DIPOLYHYDROXYSTEARATE

Definition: PEG-30 Dipolyhydroxystearate is the polyethylene glycol diester of Polyhydroxystearic Acid (q.v.) that conforms generally to the formula:



where RCO- represents the alkyl groups derived from Polyhydroxystearic Acid (q.v.) and n has an average value of 30.

Chemical Classes: Alkoxylated Carboxylic Acids; Esters

Function: Surfactant - Emulsifying Agent

Technical/Other Names:
Polyethylene Glycol (30) Dipolyhydroxystearate
Polyoxyethylene (30) Dipolyhydroxystearate

Trade Name:
Arlacel P135 (Uniqema Americas)

PEG-20 DIRICINOLEATE

JPN Translation:
ジリシノレイン酸 PEG-20

Definition: PEG-20 Diricinoleate is the diester of Ricinoleic Acid (q.v.) and PEG-20 (q.v.).

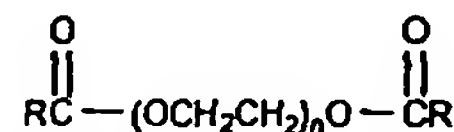
Information Source: JCLS

Chemical Class: Esters

Function: Skin-Conditioning Agent - Miscellaneous

PEG-2 DIROSINATE

Definition: PEG-2 Dirosinate is the polyethylene glycol diester of the acids derived from Rosin (q.v.). It conforms generally to the formula:



where RCO- represents the acids derived from Rosin (q.v.) and has an average value of 2.

Chemical Class: Alkoxylated Carboxylic Acids

Functions: Skin-Conditioning Agent - Occlusive; Viscosity Increasing Agent - Nonaqueous

Technical/Other Names:
Polyethylene Glycol 100 Dirosinate
Polyoxyethylene (2) Dirosinate

Trade Name Mixture:
Recol T 3 (Granel Derivados)

PEG-3 DIROSINATE

CAS No. 8050-25-7 **EINECS No.** 232-478-3

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Exhibit C

*Hawley's
Condensed Chemical
Dictionary*

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Library of Congress Catalog Card Number: 86-23333
ISBN: 0-442-28097-1

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Printed in the United States of America

Van Nostrand Reinhold Company Inc.
115 Fifth Avenue
New York, New York 10003

Van Nostrand Reinhold Company Limited
Molly Millars Lane
Wokingham, Berkshire RG11 2PY, England

Van Nostrand Reinhold
480 Latrobe Street
Melbourne, Victoria 3000, Australia

Macmillan of Canada
Division of Canada Publishing Corporation
164 Commander Boulevard
Agincourt, Ontario M1S 3C7, Canada

15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Library of Congress Cataloging-in-Publication Data

Condensed chemical dictionary.
Hawley's condensed chemical dictionary.

Rev. ed. of: The Condensed chemical dictionary.
10th ed./rev. by Gessner G. Hawley, 1981.
I. Chemistry—Dictionaries. I. Hawley, Gessner
Goodrich, 1905— II. Sax, N. Irving (Newton Irving)
III. Lewis, Richard J., Sr. IV. Title.
QD5.C5 1987 540'.3'21 86-23333
ISBN 0-442-28097-1

solidifying point -5 to -186 – 194 , iodine number 25 – 1.4645 (40°C), flash point temperature 883°F

oil and other edible oils, hydrogenated; soaps; salad oil, mayonnaise,

solid form of peanut cake
extraction of oil from the seed.
the shells, the oil meal
between 39 – 45% crude
oil basis. Typical analysis
 5% crude protein, 5.3%
free extract, 6.2%
ash, total digestible nu-

ingredient.

sulfate.

carbonate.

is pigment.

is pigment.

oxychloride, bismuth

use of plants formed in
swamps (bogs and
ice layers 3 – 10 ft thick
of 85% . Before peat
for fuel purposes it must
contain 30 – 40%
susceptible to autoignition
must be such as to mini-
mally converted to hydro-
carbon source of natural gas;
directly as a fuel. The
is only to those of the
in the north central states,
passing on a large scale
energy content is said to
be barrels of petroleum.
production of methanol
distilling. Experimental
is under way for some
use of oil, ammonia, and
byproducts.

between 4 and 8 millime-

oil cylinder rotating on
ground flint or porcelain

pebbles as the grinding medium. Its operation is similar to that of a ball mill. It is used for grinding and mixing of dry chemicals, pigments, food products, and the like. Pebble mills are usually lined with alumina, buhrstone, or similar material to protect the walls from wear.

pebulate. (propyl ethyl-n-butylthiocarbamate).

CAS: 1114-71-2. $\text{C}_{10}\text{H}_{21}\text{NOS}$.

Properties: Colorless liquid, bp 142°C (20 mm), d 0.945 , refr index 1.47 , soluble in benzene, acetone, methanol, and xylene.

Hazard: Toxic by ingestion.

Use: Herbicide.

Pechmann pyrazole synthesis. Formation of pyrazoles from acetylenes and diazomethane. The analogous addition of diazoacetic esters to the triple bond yields pyrazolecarboxylic acid derivatives.

pectic acid. An acid derived from pectin by treating it with sodium hydroxide solution, washing with isopropyl alcohol, adding alcoholic hydrochloric acid, and finally washing again with isopropyl alcohol and drying.

Use: Acidulant in pharmaceuticals.

pectin. A high molecular weight hydrocolloidal substance (polyuronide) related to carbohydrates and found in varying proportions in fruits and plants. Pectin consists chiefly of partially methoxylated galacturonic acids joined in long chains.

Properties: White powder or syrupy concentration. Commonest characteristic of pectins is their property of jelling at room temperature, after addition of sugar to fruit juices in the preparation of jams or jellies. Soluble in water, insoluble in organic solvents.

Derivation: By dilute-acid extraction of the inner portion of the rind of citrus fruits, or of fruit pomaces, usually apple.

Method of purification: Following decolorization, the extracts are concentrated by evaporation or the pectins precipitated with alcohol or acetone. Grade: Pure (NF) containing not less than 6.7% methoxy groups and not less than 74% galacturonic acid; 150 -, 200 -, 250 -jelly grades, containing various diluents.

Use: Jellies, foods, cosmetics, drugs, protective colloids, emulsifying agents, dehydrating agents. See also gel.

pectinase. An enzyme present in most plants. It catalyzes the hydrolysis of pectin to sugar and galacturonic acid.

Use: Biochemical research, juice and jelly industry.

"Pectinol."TM TM for formulated enzyme concentrate of fungal origin with varying degrees of pectinase activity which hydrolyze pectic substances.

Use: Clarification of wines and fruit juices and processing of jellies.

pectin sugar. See l-arabinose.

PEG. Abbreviation for polyethylene glycol.

"Pegospense."TM TM for a series of polyglycol esters of fatty acids.

Use: Plasticizers, softeners, wetting agents, detergents, lubricants, emulsifying agents.

pelargonic acid. (n-nonoic acid; n-nonanoic acid; n-nonylic acid). CAS: 112-05-0.

$\text{CH}_3(\text{CH}_2)_7\text{COOH}$.

Properties: Colorless or yellowish oil with slight odor, d 0.9052 ($20/4^{\circ}\text{C}$), mp 12.5°C , bp 255.6°C , refr index 1.4322 (20°C). Soluble in alcohol, ether, and organic solvents; almost insoluble in water. Combustible.

Derivation: By the oxidation of nonyl alcohol or nonyl aldehyde, the oxidation of oleic acid, especially by ozone.

Grade: Technical, 99% .

Hazard: Strong skin irritant.

Use: Organic synthesis, lacquers, plastics, production of hydrotropic salts, pharmaceuticals, synthetic flavors and odors, flotation agent, esters for turbojet lubricants, vinyl plasticizer, gasoline additive.

See also nonic acid.

pelargonic alcohol. See nonyl alcohol.

pelargonic aldehyde. See nonanal.

pelargonyl chloride. (n-nonanoyl chloride).

$\text{CH}_3(\text{CH}_2)_7\text{COCl}$.

Properties: Bp 80 – 85°C (5 mm), min assay 97% , soluble in hydrocarbons and ethers, decomposes in water.

Hazard: Skin irritant.

Use: Intermediate in organic synthesis.

pelargonyl peroxide. $(\text{C}_8\text{H}_{17}\text{COO})_2$.

Properties: Water-white liquid with a faint odor, d 0.926 min ($25/25^{\circ}\text{C}$), mp 10°C , refr index 1.443 min (25°C), insoluble in water and glycerol, soluble in alcohol and hydrocarbons.

Hazard: Dangerous fire risk in contact with organic materials. Strong skin irritant and oxidizing agent.

Use: Initiator of polymerization reactions.

"Pelaspan."TM TM for a series of expandable polystyrenes in bead or pellet form. Each bead

abrasion-resistant, resistant to water and most chemicals, d 0.92. Slightly soluble in turpentine, petroleum naphtha, xylene, and toluene at room temperature; soluble in xylene, toluene, trichloroethylene, turpentine, and mineral oils at 82.2C; practically insoluble in water; slightly soluble in methyl acetate, acetone, and ethanol up to the boiling points of these solvents. Available as emulsified and nonemulsified forms. Combustible.

Use: Mold-release agent for rubber and plastics, paper and container coatings, liquid polishes and textile-finishing agents.

polyethylene glycol. (PEG; polyoxyethylene; polyglycol; polyether glycol).

CAS: 25322-68-3. Any of several condensation polymers of ethylene glycol with the general formula $\text{HOCH}_2(\text{CH}_2\text{OCH}_2)_n\text{CH}_2\text{OH}$ or $\text{H}(\text{OCH}_2\text{CH}_2)_n\text{OH}$. Average molecular weights range from 200 to 6000. Properties vary with molecular weight.

Properties: Clear, colorless, odorless, viscous liquids to waxy solids. Soluble or miscible with water and for the most part with alcohol and other organic solvents, heat-stable, inert to many chemical agents, do not hydrolyze or deteriorate, have low vapor pressure. Combustible.

Derivation: By condensation of ethylene glycol or of ethylene oxide and water.

Use: Chemical intermediates (lower molecular weight varieties), plasticizers, softeners and humectants, ointments, polishes, paper coating, mold lubricants, bases for cosmetics and pharmaceuticals, solvents, binders, metal and rubber processing, permissible additives to foods and animal feed, laboratory reagent.

See also "Carbowax."

polyethylene glycol chloride.

$\text{H}(\text{OCH}_2\text{CH}_2)_n\text{Cl}$. Any of a group of polymers, usually colorless liquids with very low vapor pressure at room temperature. Molecular weights from 100 to 600. Miscible with water, d for a low molecular weight polymer is 1.18 (20C), for a high molecular weight polymer 1.14 (10C). The former sets to a glass at -90C, the latter sets to a wax-like solid at 20C. Combustible.

Use: Solvents for cleaning, extracting, and dewaxing.

polyethylene glycol ester. A mono- or di-ester resulting from the interaction of an organic acid with one or both of the glycol ends of the polyethylene glycol polymer. These are also called polyoxyethylene esters, polyglycol esters, or by a coined generic name.

polyethylene imine. CAS: 26913-06-4.

$(\text{CH}_2\text{CH}_2\text{NH})_n$. A synthetic polymer which

is a highly viscous, hygroscopic liquid when anhydrous; completely miscible with water and lower alcohols; insoluble in benzene. Reactive toward cellulose. Combustible.

Use: Adhesive and anchoring agent for paper and cellophane, dewatering agent and wet strength improver in paper manufacture, fixative, levelling agent in textile fibers, antiblocking agent on plastic films, flocculating agent, ion exchange resins, complexing agents, disinfectant for textiles, skins, photographic chemistry, absorbent for carbon dioxide, water purification, polyelectrolyte.

polyethylene oxide. A plastic reported to be dimensionally stable at high and low temperatures and designed as a substitute for phenolics.

polyethylene oxide sorbitan fatty acid esters.

See polysorbate.

polyethylene terephthalate. CAS: 25038-59-9.

$(\text{C}_{10}\text{H}_8\text{O}_4)_n$. A thermoplastic polyester formed from ethylene glycol by direct esterification or by catalyzed ester exchange between ethylene glycol and dimethyl terephthalate. Offered as oriented film or fiber. It melts at 265C, tenacity is 2.2-4 g/denier (staple) and up to 9.0 g/denier as continuous filament; d 1.38. It has good electrical resistance and low moisture absorption. Resists combustion and is self-extinguishing.

Use: Blended with cotton, for wash-and-wear fabrics; blended with wool, for worsteds and suitings; packaging films, recording tapes, soft-drink bottles.

polyethylene thiuram sulfide.

Derivation: Oxidation of diammonium ethylene bisdithiocarbamate with calcium hypochlorite. Grade: 50% vegetable powder, 95% technical powder.

Use: Fungicide.

polyformaldehyde. See p-formaldehyde.

polyfurfuryl alcohol. See furfuryl alcohol.

polyformaldehyde resin. See acetal resin.

"Poly-G." TM for a series of polyethylene glycols, polypropylene glycols, and polyoxypropylene adducts of glycerol. G200, 300, 400, and 600 are liquid polyethylene glycols; G1000, 1500, GB-1530, and BG-2000 are waxy polyethylene glycols. The number indicates the molecular weight. G420P, 1020P, 2020P are propylene oxide condensation polymers of propylene glycol. G1030PG, 3030PG, 4030PG are propylene oxide condensation polymers of glycerol.

"Polygard." TM for a mixture of alkylated aryl phosphites.

Properties: Liquid; clear amber, d 0.99; soluble in acetone, alcohol, benzene, carbon tetrachlo-

ride, solvent naphtha, water, but can hydrolyze. Use: Nondiscoloring fixative.

polyglycerol. One of a series of glycerol with its esters. (a) triacontaglycerol, possibly 166, a liquid with 4 OH groups at 65.5C; (b) heptadecaglycerol with 8 OH groups; (c) decaglycerol with 10 OH groups, viscosity 3. Properties: Viscous liquids, water, alcohol, and humectants much more effective than glycerol. Combustible. Derivation: Glycerol and fatty acids. Catalyst: (200-275C) phosphoric acid. A stream of nitrogen is used in the reaction and heating.

Use: Surface-active agents, adhesives, lubricants, used for both edible and nonedible purposes.

polyglycerol ester. Complete esters of saturated fatty acids with a variety of glycerols ranging from mono- to decaglycerol. Prepared by (a) transesterification or (b) esterification. Some examples of properties: (a) monooleate, semisolid, d 0.91, mp 17.7C; (b) dioleate, viscous liquid, d 0.91, mp -17.7C.

Examples of (b): (1) dioleate, viscosity 322 cp (75.5C), d 0.91, mp -17.7C; (2) dioleate, viscosity 30.1 cp (75.5C), d 0.91, mp -17.7C. Use: Lubricants, plasticizers, gelling agents, adhesives, crosslinking agents, dispersants, pharmaceuticals, cosmetics.

polyglycol. See polyethylene glycol.

polyglycol amine H-1. $\text{HO}[\text{C}_2\text{H}_4\text{O}]_n\text{C}_3\text{H}_6\text{N}$. Properties: Colorless liquids, bp 14.5C, solid at -17.7C, flash p 295F (100F).

polyglycol distearate. CAS: 501-77-1.

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